## **ABSTRACT**

A deformable mat of at least one web including at least one reinforcing substance and at least one thermoplastic substance, these substances being in a form of chopped yarns and/or continuous yarns, and the yarns being bonded together so that the mat has an elongation at break in all directions of at least 50% and preferably varying from 100 to 150%. A process for manufacturing the deformable mat forms a web of the yarns, treats the web under conditions allowing the yarns to be moderately bonded, and collects the mat obtained. The mat can be used for manufacturing composite parts by vacuum molding or compression molding.